

SEQUENCE LISTING

<110> KANEKA CORP	ORATION	
-------------------	---------	--

- <120> A new promoter
- <130> T747.SBP-7
- <150> JP 2002-105240
- <151> 2002-04-08
- <160> 27
- <210> 1
- <211> 29
- <212> DNA
- <213> Artificial Sequence
- <220×
- <223> PCR Primer for Sc-ACT1 5'
- <400> 1
- ccggaattca tggattctgg tatgttcta
- <210> 2
- <211> 29
- <212> DNA
- <213> Artificial Sequence
- <220>
- <223> PCR Primer for Sc-ACT1 3'
- <400> 2
- ccggaattca agacagcacg aggagcgtc
- <210> 3
- <211> 30
- <212> DNA
- <213> Artificial Sequence
- <220>
- <223> PCR Primer for Sc-GAP3 5'
- <400> 3
- atgatcagaa ttgctattaa cggtttcggt
- <210> 4
- <211> 29
- <212> DNA
- <213> Artificial Sequence
- <220>
- <223> PCR Primer for Sc-GAP3 3'
- <400> 4
- ttaagccttg gcaacatatt cgatcaagt

29

30

29

29

```
<210> 5
<211> 30
<212> DNA
<213> Artificial Sequence
<223> PCR Primer for Sc-PMA1 5'
<400> 5
atgactgata catcatcctc ttcatcatcc
                                                                        30
<210> 6
<211> 30
<212> DNA
<213> Artificial Sequence
<220>
<223> PCR Primer for Sc-PMA1 3'
<400> 6
ttaggtttcc ttttcgtgtt gagtagagac
                                                                        30
<210> 7
<211> 30
<212> DNA
<213> Artificial Sequence
<220>
<223> PCR Primer for Sc-TEF1 5'
<400> 7
atgggtaaag agaagtctca cattaacgtt
                                                                        30
<210> 8
<211> 30
<212> DNA
<213> Artificial Sequence
<220>
<223> PCR Primer for Sc-TEF1 3'
<400> 8
                                                                        30
ttatttctta gcagcctttt gagcagcctt
<210> 9
<211> 1300
<212> DNA
<213> Candida maltosa
<220>
<223> Cm-ACT1 Promoter
<400> 9
gatctcggct gtgaatcgca atttgccatg acacctctcg ctatttccga attacataag 60
accatcagtg aaagattgga gagaaaaaaa tgtgaacaga atagtcggag tttatattaa 120
attcatcgtc caaaaaaacc tgaatatcat tggctctgcg gtttattaaa aagtgtaccg 180
```

ccgacttatc cgaacaatta aacgtaacat gactgcaaaa aaaaaccatg aagaaaacat 240

```
ttacaaaata tttgtaatat cgtcgaagat aataaaccat accagacgga aagttggatg 300
aaattgttgc aaaaataatt atgctactcg ttctcacgtt taaatataca cgtagatcaa 360
accagcaaac ttctataaat tgccatcgat ccaccaaaca tcgtcaaaaa caattttgta 420
actttattgc ctctcatacg tttaaatttc aaaatcaata aatattaatc aaccgtgtaa 480
caaaaaaaaa aaactgagat agtgcacagc ccaaaaaggt ttagtgattg cctccaaaca 540
tacataatag gttatttttt tcgttgaacq catttcttqc tcgctcaccg aatttctgcc 600
aacgaaacaa attttatata tttcattttt ttctctttca tgtaattttt tctttctttc 660
tcatttaaaa tggacggtgg tatgtttaaa ctatttcatt gacttgattg atcgattgat 780
tgattggttg atttcttcaa agcacggact ttttttcttt ctccattatt tgatttttag 840
attttgggtg atttttttgt tttttttggg gagtgactga tctaatctca attcaggatt 900
atgggacgaa gaagaatcga gagatggaat ctagatatat caatttcaat ttttattgtt 960
ttgatctcga gagtatttat ggaaagattt gattgaacaa ctttttttt cattggcctg 1020
gatcaattcc gtccataaaa gaaagagagc tttacactga tcgattcatt catattttt 1080
acactggagt ttcttcaaaa atcattggat tctacccaat ggcaatccta catcttaaaa 1140
atcatcattt attacgagtt tattggataa tggtcacttt aaattcttgg tatcttgaat 1200
ttgttttttt tttttttt tttcagaaat ttgtaccccc ttttaaaaat gttcagaatt 1260
ttttttttt tttcgtcaaa cccacacaca cacatttttc
                                                              1300
<210> 10
<211> 3000
<212> DNA
<213> Candida maltosa
<220>
<223> Cm-GAP3 Promoter
<400> 10
ctgcaggtgg gatcttcaga ctgtttaata tttcttcaat atgatgggtc ccataattag 60
aaaccccaat actcttaaca atccccttgg acacggcttc ttccatgact ttccaacttt 120
ccaatcgttt ttgtttccca ggtaatggtg aatggatcaa taacaaatcg atatatttca 180
aatcaccaat ttgatccaac atagtagtga tcgcatgtct tgtatttgtt gtacccaatt 240
gactattcca tagtttggtg gtatagaaaa actctgaacg agggatatct ggattatcgt 300
gaaggaattt cgttatccct tctgccactt cttcttcgtt gccgtacaaa actgcggtat 360
caaaatgtcg atatccgact ttacaggctt cgtagacaat gctggccgtt ttatttcttg 420
gaatgtcgta acagcctaaa ccgattgaag ggatgctata tccggaattg agtttgatta 480
atcgaaatga catgattgtg ttgagtatat tgaaagcaat aattaatat aaaaaaagag 540
gaacgaaaaa aaagagagat gttgaagtgg ttgggttatg taagtacgta tttattcact 600
gattattaat tgctatctta ataatatttt tttccctccc atttttactt tttttggata 660
tcttgtttga aatgtggggg caaaaaaaaa aaaaatttac atagccctat tccataaaat 720
ataaatcttt tatgtatatt tgcaacatcg acacaatttg atatttccaa atactccagg 780
tttttttttc tttttcattc acagtctcgg gattaagtgt gaaacccggg ggaaatcgaa 840
attittttt ttcagcattg tttatacaca atticagtti gtccgaatac acccgcacgt 900
gattccccca aacaggcaaa aaaaaaaaa aatgaatata tagtgagtac gtgtcccgcg 960
gctcaggaac ctctttttt tttagaggtg gtatgatgtg aagtattttt ttttttcct 1020
ttttcctttt cctttttcat tcacaccacc accatataga atttacttac gtcaggttat 1080
attctagaca acctttgtgg ttttttttt taaagggaat ttgagccact atgtccatag 1140
aaaacttttt actgtaacga aaatctatag tctgagataa aggggaaaat ggtaaccacg 1200
tattttttta ttttttttg gattcctata accccgatat ttatgttcgg aattgtagat 1260
atatagatat tccagattac ttggctgtaa tgtaggctat ggaaatgata ctactcatca 1320
atataaaccc attgacagta taagatagat aattatactg tggtggtacc atataaaatt 1380
aatatgttga tcaggtgctt ttggcaacac cacgagcttt gcgcaagttt ttttttttt 1440
ttcttttttg ttttttgttg gttgtttgat gcaaatggat gataatgccc cgggcgcggg 1500
cgtgtgtgac gcaaatccaa tagaaaaaat tcacctggtt aaacctattt tcactgacaa 1560
atcaatttat tttgccaaaa gaaaaaaaga atatataata acccttgaat gtccaattgg 1620
ttaacataca aaaaatggct attaaaattg gtattaacgg tttcggtaga atcggtagat 1800
tagtcttgag aattgcttta ggcagaaaag acattgaagt tgttgccgtc aacgatccat 1860
```

tcattgctgc tgattacgct gcttacatgt tcaaatacga ttccacccac ggtagataca 1920

```
aaggtgaagt caaatctgaa ggtaacgatt tagtcattga cggtaagaaa atccaagtct 1980
tccaagaaag agacccagct aacattccat ggggtaaaga aggtgttgaa tatgttattg 2040
actccactgg tgttttcacc aagattgaag gtgctcaaaa acacattgat gctggtgcca 2100
aaaaagttat catcactggt tcatctgctg atgctccaat gttcgttgtt ggtgttaacg 2160
aagacaaata caccccagac ttgaaaatca tttctaacgc ttcctgtacc actaactgtt 2220
tagctccatt agctaaagtt atcaacgata ctttcggaat tgaagaaggt ttgatgacca 2280
ctgtccactc catcactgct acccaaaaga ctgttgacgg tccttcccac aaagattgga 2340
gaggtggtag aactgcttcc ggtaacatta tcccatcttc tactgqtqct qctaaaqccq 2400
tcggtaaagt tatcccagaa ttaaacggta aattgactgg tatgtctttg agagttccaa 2460
ccaccgatgt ctccgttgtt gacttgactg tcagattatc taaaccaacc acttacgaaq 2520
aaatctctga agctatcaag aaagctgctg atggtccatt gaacggaatc ttgggttaca 2580
ctgaagatgc tgttgtctct actgacttct tgtcttctaa ctactcttct gttttcgatg 2640
ctaaagctgg tatcttgttg tccccaactt tcgtcaaatt gatctcttgg tacgataacg 2700
aatacggtta ctctaccaga gttgtcgact tattggaaca cgttgccaaa gtttccggtt 2760
cctcttaact cagaaacaag ttttagttga cattgtgtct gttttctttt attacatagg 2820
ttgttatatc aatatatgtt tataaatacg tcttgaaaat cttgtttttt ttttttgtaa 2880
attttgtaaa ttttcatctt gtgcgggaca aaggacgagt ggagaaaaaa aaaacgaaac 2940
tttttttttc ttttctccga aattgtaaac aaaaacaaca acaacacctc catgtcggaa 3000
<210> 11
<211> 3173
<212> DNA
<213> Candida maltosa
<220>
<223> Cm-PMA1 Promoter
<400> 11
tctagaattt atattggttt ctttctttt ttttagatcg tttattaatt aattagttaa 60
ttaattactt cataacatgt aaattagatt taaccaaaaa aaagaaaagt taaagataat 120
ggctaagtag atgttaaagc caggttcaat tgtttataat actcatcatc atcaatcaat 180
aataaatett teatgtaetg gteaattaat taacegaegt aataagagat eettggataa 300
atagtaagaa tatccagcaa tttacgtacg taaatgaaac acaaatgaat gaatgctgaa 360
ctttcatgac ttaattgagt agtttagttg gttggtatat gcgaaattta tttattccga 420
taattattat caataggttg tagcgggaaa tttaaaacca aacaggagat tagaagcggc 480
aaaacgaaaa agggtcgggt aaatctactc aacaaatatt ataataatga ttgtttattt 600
atctatggat gtttggatga attaagtcaa gtttgtgtta tttcgtatga aagagacata 660
gttagagata gagatagata gacaaataga tttgagagat gaggtggttc agttacatta 720
ataccaagaa agttatatgt aatatcagtt gatattcaac aattgctqtt acaattqtca 840
acticticaact totaccitice cattigaata totototice agricatatga gitigtatica 900
aaattttttt tatttccgtt cggcataatt aattttgtgt cgtgggaata tgcacaattt 960
ataaaacaaa agcaaaatct aaattqaqqq aatttctqca qaaqaqtcaa aaaaaacata 1020
aagtcgtgtc tcggaactca aaaataacat tttccatact aagattaaac gataacattt 1080
aaaaaaatcc acaaatttga ttggtcggaa taaaaaataa aaatatccct caccctaaag 1140
```

aaagaaatt tttttatta gttgagaaaa ccgaataatt ttgtcctatg aggtaattaa 1200 atatttccat tttgtgttat tgtttattat tttcctaaac cactttatca aaaaaagaaa 1260 aagaaatttt tcttctttt tggacaaaat taaaaattt ttacaacctc ttctaaaaa 1320 gaaaaacaac aacaacagaa aaacgacctc caaaaaaatc ttacaaccaa aaatttaaat 1380 ttttaatttt ccaaaggtaa tataaaaagg ataataaatt cccttgatta gattttttt 1440 tttaacgaat tctttattca tttttccttt ttccctttt ttttttcc tttttttaga 1500 tagtcaatcg aagtttact tttataact tttttccta cccactaatt cttactttct 1560 tttttttttc attcaaaaa tttttaatag tattttaaaa aatataccat ctcacaccc 1620 caaaaaaagaa aaataaaagg gaattcattt ttaatacct aatttttaa tattagaatt 1680 atagagagag aaaaagaac agaaaacaaa aacttatcat gagtgctact gatcctacta 1740 atgaaaagat caataaagac atcccgatg atgaagatga agaagaagaa gatcaagctt 1860 cttttaaagc cgtccctgaa gaattattac aaactgaccc aagaactggt ttatctgatg 1920

```
atgaagttca aaaaagaaga aaaaagtatg gtttgaatca aatggctgaa gaacaagaaa 1980
atttagtcat gaaattcgtc atgtttttcg ttggtccaat tcaattcgtt atggaagccg 2040
ctgctgtttt agctgctggt ttggaagatt gggtcgattt tggtgttatc tgtgctttat 2100
tggtattgaa tgcttttgtt ggtttcatcc aagaatacca agctggttct attgtcgatg 2160
aattaaaaaa gactttagct aacgttgctt tagttgttag aaatggtcaa ttggttgaaa 2220
ttccagccaa tgaagttgtt ccaggtgata tcttgcaatt ggaagatggt accgttatcc 2280
caactgatgg tagaattgtt tctgaagatt gtttattaca agttgatcaa tctgctatta 2340
ctggtgaatg tttagctgtt gacaaaagat ctggtgactc ttgttactct tcttccactg 2400
ttaaaactgg tgaagctttt atggttgtta ccgctactgg tgacaacact tttgttggta 2460
gagetgetge tttagteaac aaagetteeg etggtaetgg teattteaet gaagttttga 2520
acggtattgg tactacattg ttggttttcg tcattgttac tttgttggtt gtctgggttg 2580
cttgtttcta cagaactgtt agaattgttc caatcttgag atacactttg gctatcacca 2640
ttattggtgt tccagtcggt ttaccagctg tcgttaccac taccatggct gtcggtgctg 2700
cttacttggc taaaaaacaa gctattgtcc aaaaattgtc tgctattgaa tctttggctg 2760
gtgtcgaaat tttatgttct gataaaactg gtactttgac caagaataaa ttgtctttac 2820
atgaaccata cactgttgaa ggtgttgaac cagatgactt gatgttgact gcttgtttgg 2880
ctgcttccag aaagaagaag ggtttggatg ctattgataa agctttcttg aaatctttga 2940
ttaactaccc aagagctaaa gctgctttac caaaatacaa agttattgaa ttccaacctt 3000
ttgatcctgt ctccaaaaaa gttactgcca ttgttgaatc accagaaggt gaaagaatta 3060
tttgtgttaa gggtgctcca ttattcgtct tgaagactgt tgaagatgcc catccaatcc 3120
caqaaqatat ccatqaaaac tatcaaaaca ctqttqccqa atttqcttct aga
<210> 12
<211> 1675
<212> DNA
<213> Candida maltosa
<220>
<223> Cm-TEF1 Promoter
<400> 12
ctgcagcagc ttctactgct gccgctccaa cattaggtgc tgaatatact agcggtactg 60
gtaaattagt tggtgtggtt acattgactg atattttggg attatttgcc acatcaaaag 120
gtagaagaac tgatccacaa gctgcaagaa accaaagaag aagaagttcc acttccacta 180
cgagatcatc tgttgatagt gcattaaacg ctgaaggtgt gattaatcct tctgccacca 240
ccaccaccga tgccattcct ggtaataaca attctagtcg tagagaaagt gttgatgctt 300
caagtgatgt tttcagaaaa tcatttacta aaccccaaga aaatgtattt tccaaagagt 360
aagggttcct tctttcataa caaaaaaaga aaaacaatca ccgatttatt tatttatttg 420
caatgctatt tataatatat tttgtagata aaaacaaatg aaaaatcttg ttagctatgt 480
atactactac atatatacta caataaaaac acaccaaaat qaaacqtqtt ttqcacaatt 540
tegeacgact cagaggeate geatttetgt cetttttgta egteattgta attttttta 600
tgttattttt tttacagcaa gcaatccaaa aaaacaaaaa aaaaatgaga gagaaaaaaa 660
tgagggggtt gatttaaaaa gatggtcaaa aatattcgtg acatattaca taatcgatga 720
gtttgatatg gaacgaatat tgatggtttt ggtctgaatt gatatggtgt aagtatttgt 780
tggtgataat tttatcaaca taaactcaat tccgctcaat tgtacaaaat tgaccttctt 840
tcgccttttg ttcaatgcca ttttttccaa taatttttt tttcaaattt tgccatccag 900
cacaaagaaa aaaaaaattt acatgtccga caactcaccg gtgtttctga caacaattga 960
caacaccagt ctgtagaccc aattggtaag tcaatgataa ctactacatc tacctagttg 1020
ttatctttta acttaaaatt agcaaagaaa taataatggt tatcattgaa gatggtttca 1080
caaaattaaa cgaatacgtg tacgttttac caaaaagatt tttttttttc tctttagttt 1140
ttttttcqtt gttcttccca tcactgaaaa atttttctcc ctctatataa atcaatccca 1200
tcaacqaaaa tttttttct tcctttttga atttttttt tctccttttt ttttctcctt 1260
ttttttttctc cttttctttc ttcatctaac ttatatttaa tcaatcatgg gtaaagaaaa 1320
aactcacqtt aacgtcgttg ttattggtca cgtcgattct ggtaaatcta ctaccaccgg 1380
tcacttgatc tacaaqtgtq gtggtattga caaaagaacc attgaaaaaat tcqaaaaaga 1440
agetgetgaa ttaggtaaag gttettteaa atacgettgg gtettggata aattgaagge 1500
tgaaagagaa agaggtatca ccattgatat cgctttgtgg aaattcgaaa ctccaaaata 1560
ccacgttacc gttattgatg ctccaggtca cagagatttc atcaaaaata tgattactgg 1620
```

tacttctcaa gctgattgtg ctattttgat tattgctggt ggtactggtg aattc

```
<210> 13
 <211> 1794
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Polyhydroxyalkanoate Synthetase Gene, ORF2S
 <400> 13
atg tot caa coa tot tat ggt coa ttg tto gaa got ttg got cat tac
aat gat aaa ttg ttg gct atg gct aaa gct caa acc gaa aga act gct
caa gcc ttg ttg caa act aac ttg gat gat ttg ggt caa gtt ttg gaa
caa ggt tct caa caa cca tgg caa ttg att caa gct caa atg aat tgg.
tgg caa gat caa tta aaa ttg atg caa cac act ttg tta aaa tct gct
ggt caa cca tct gaa cca gtt att act cca gaa aga tct gat aga aga
ttt aaa gct gaa gct tgg tct gaa caa cca att tat gat tac tta aaa
caa tcc tat ttg tta act gct aga cat ttg ttg gct tct gtt gat gct
ttg gaa ggt gtc cca caa aaa tct aga gaa aga ttg aga ttc ttt act
aga caa tac gtc aac gct atg gct cca tct aat ttc ttg gct act aac
cca gaa ttg tta aaa ttg act ttg gaa tcc gat ggt caa aat ttg gtt
aga ggt ttg gct tta ttg gct gaa gat ttg gaa aga tct gct gat caa
tta aac att aga ttg act gat gaa tcc gct ttt gaa tta ggt aga gat
ttg gct ttg act cca ggt aga gtt gtt caa aga act gaa tta tat gaa
                                                                   672
tta att caa tac tct cca act act gaa acc gtt ggt aaa acc cca gtt
ttg atc gtt cca cca ttc att aat aaa tat tac att atg gat atg aga
cca caa aac tcc ttg gtc gct tgg ttg gtc gct caa ggt caa acc gtt
ttc atg att tcc tgg aga aac cca ggt gtt gct caa gct caa att gat
tta gat gat tat gtt gtt gat ggt gtc att gct gct ttg gat ggt gtt
gaa gcc gct act ggt gaa aga gaa gtt cac ggt att ggt tac tgt att
ggt ggt acc gct ttg tct tta gct atg ggt tgg ttg gcc gcc aga aga
                                                                   1008
caa aaa caa aga gtt aga act gct act ttg ttt act act ttg ttg gat
                                                                   1056
ttc tcc caa cca ggt gaa ttg ggt att ttt att cat gaa cca att atc
                                                                   1104
gcc gcc tta gaa gcc caa aat gaa gct aaa ggt att atg gat ggt aga
                                                                   1152
caa ttg gcc gtc tcc ttc tct ttg ttg aga gaa aac tct tta tat tgg
aat tac tat att gat tct tac tta aaa ggt caa tct cca gtt gct ttt
                                                                   1248
gat ttg ttg cac tgg aac tct gat tct act aat gtt gcc ggt aaa act
                                                                   1296
cat aac tct ttg ttg aga aga tta tat ttg gaa aat caa ttg gtt aaa
ggt gaa tta aaa att aga aac act aga att gat tta ggt aaa gtt aaa
                                                                   1392
act cca gtt ttg ttg gtt tct gcc gtt gat gat cac att gct tta tgg
caa ggt acc tgg caa ggt atg aaa ttg ttc ggt ggt gaa caa aga ttt
                                                                   1488
tta ttg gcc gaa tcc ggt cat att gct ggt att att aat cca cca gct
                                                                   1536
gct aac aaa tac ggt ttc tgg cac aat ggt gct gaa gct gaa tct cca
                                                                   1584
gaa tot tgg ttg got ggt gcc acc cat caa ggt ggt tcc tgg tgg cca
                                                                   1632
gaa atg atg ggt ttt att caa aac aga gat gaa ggt tct gaa cca gtc
                                                                   1680
cca gcc aga gtc cca gaa gaa ggt ttg gct cca gct cca ggt cac tat
                                                                   1728
                                                                   1776
 gtc aaa gtt aga tta aac cca gtt ttc gct tgt cca acc gaa gaa gat
 gct gct tct aaa ttg taa
                                                                   1794
 <210> 14
 <211> 218
 <212> DNA
 <213> Candida maltosa
 <220>
 <223> terminator ALK1t
```

atagatggat ttttcttttt tatgtgtatt tccggttaat aaatgtttaa atttttttt 60 taataaaaat atttgtagtt atttatatgc aaaaaaaaa aatattcaaa gcaatcttcc 120

```
tttctttctt tatctttccc ccatgctaag gtctaaaaca ccacaactta aaacccaact 180
taaccgtata atactaagat caatctccaa agatgcat
<210> 15
<211> 1017
<212> DNA
<213> Candida maltosa
<223> promoter ALK1p
<400> 15
atgcatgaac aggatttaat cccaagaaaa aagtctattt tctattttca caaggaaact 60
ggaaaaacct ttttgtgttt tgaagtagct ccgtaataac ctgtaaaaaa ataaattttg 120
aagatttgac ttgctgatga aaatgctatc agtgtagctc tagacttgat actagactat 180
gatggcaaca catggtggtc aacgtgcaag acatcaccca atgagaagac tgctaaccag 240
aaaaaaaagg ggacaaaaga aaaactcgag agaaaaagtc aaattggtgt aaaattggct 300
atttttggta ctttcctaat ggggaaatta attgtttaaa attccagttt ttccagagtt 360
aagatttcqa ccaattattt ttaatccata tgatcttcat cattatcaac ttgtgaaaaa 420
taataatcqa qqtacqttta atacqaqata ttaqtctacq qctatqaatq ttqqatatac 480
ttcattqacq atcaqaaqct tqattqqtta ttcaqqtqca tqtqtqqata taaacccaac 540
aaattatcta gcaactgtgc cttccccaca ttggtcaaag aaaccctaaa gcaaattaaa 600
atctggataa ataaatcatt catttcacat tttccggtta gtataaggtt ttttaaattt 660
ttttttacag tttagccctt tcaattacca aatacggtaa caatgtgctt tgtaacatgc 720
aggggatttt ctccgttgct gttttctcca catgctttta atgtgtaata aattaaaaaa 780
attacaaaga aaaaccggca tataagcatc ggagtttaca ttgttaacta actgcaaaat 840
ggcgatgttt caaatcaaca aaatttaaaa aaaccccaaa aaaaaagtat catataaatt 900
aaactcaaaa tccttttgat tgcataaaat ttttaaatct cttcttttt ttcttttta 960
ctttcttatc tattctattc tttttttata tatctaattc atttataaca tctggtc
<210> 16
<211> 46
<212>DNA
<213>Artificial Sequence
<223>PCR Primer for ALK1p 5'
tttttcagct ggagctcgtc gacatgcatg aacaggattt aatccc
                                                                    46
<210> 17
<211> 39
<212> DNA
<213> Artificial Sequence
<220>
<223> PCR Primer for ALK1p 3'
<400> 17
ccggaattcc atatgcagat gttataaatg aattagata
                                                                      39
<210> 18
<211> 32
<212> DNA
```

<213> Artificial Sequence

```
<220>
<223> PCR Primer for ALK1t 5'
<400> 18
cggaagctta tagatggatt tttcttttt at
                                                                        32
<210> 19
<211> 46
<212> DNA
<213> Artificial Sequence
<223> PCR Primer for ALK1t 3'
tttttgatat cgagctcgtc gacatgcatc tttggagatt gatctt
                                                                     46
<210> 20
<211> 47
<212> DNA
<213> Artificial Sequence
<223> PCR Primer for Cm-ACT1p 5'
<400> 20
cgcggatccg aattcgtcga catgcatgga tctcggctgt gaatcgc
                                                                     47
<210> 21
<211> 35
<212> DNA
<213> Artificial Sequence
<220>
<223> PCR Primer for Cm-ACT1p 3'
<400> 21
gcgggatccc atatgtatcc aataaactcg taata
                                                                    35
<210> 22
<211> 35
<212> DNA
<213> Artificial Sequence
<220>
<223> PCR Primer for Cm-GAP3p 5'
<400> 22
atggctatta aaattggtat taacggtttc ggtag
                                                                      35
<210> 23
<211> 35
<212> DNA
<213> Artificial Sequence
```

<220>

```
<223> PCR Primer for Cm-GAP3p 3'
<400> 23
agaagcattg gagataatct tcaagtctgg agtgt
                                                                      35
<210> 24
<211> 34
<212> DNA
<213> Artificial Sequence
<223> PCR Primer for Cm-PMAlp 5'
<400> 24
gaatatctct cttccagtca ctcgagttgt attc
                                                                      34
<210> 25
<211> 28
<212> DNA
<213> Artificial Sequence
<220>
<223> PCR Primer for Cm-PMA1p 3'
<400> 25
ctcatatgaa gtttttgttt tctgtctc
                                                                      28
<210> 26
<211> 34
<212> DNA
<213> Artificial Sequence
<220>
<223> PCR Primer for Cm-TEF1p 5'
<400> 26
gcgggatcct cgagtaaggg ttccttcttt cata
                                                                       34
<210> 27
<211> 38
<212> DNA
<213> Artificial Sequence
<220>
<223> PCR Primer for Cm-TEF1p 3'
<400> 27
```

ttttctttac ccatatgtga ttaaatataa gttagatg

38